

# **USB2300**

USB3.0 Dual ports PCI Express
Host Controller



#### Introduction

Super-Speed USB3.0 interface is the next revolution in I/O interconnect standards that will deliver the bandwidth and features required by PCs, consumer electronics and communications devices. With 10 times faster throughput than USB 2.0 standard and backward compatible with current USB device features, USB3.0 interface will be the trendy of IT technology.

SUNIX USB2300 is a dual-port Super-Speed USB3.0 PCI Express card, and it is compliant with the PCI Express Generation 2 specification for host PC system. It works up to 5 Gbps for data transfer when connecting to USB 3.0 compliant peripherals, while maintaining compatibility with existing USB peripheral devices. With USB Hot-Swapping and Plug-n-Play function, you don't have to worry about running out of slots on your motherboard or complicated hardware installation process.

SUNIX USB2300 card supports USB3.0 High-Speed device and backward compatible with USB2.0 High-Speed and USB1.1 Full-Speed device. It is an ideal choice for external storage devices, MP3 players, external writer, digital cameras, webcam, networking and video devices, and all other USB devices.

#### **Features**

- Supports PCI Express Base Specification Revision 2.0.
- Single-lane (x1) PCI Express throughput rates up to 5 Gbps.
- Compliant with Universal Serial Bus 3.0 specification Revision 1.0.
- Compliant with xHCI (eXtensible Host Controller Interface) specifications Revision 0.95.
- Supports simultaneous operation of multiple USB 3.0, USB 2.0 and USB 1.1 devices
- Supports USB data transfer rate of 1.5/12/480/5000 Mbps.
- Expands two external USB3.0 Super-Speed ports on the system.
- Each USB port supplies maximum +5V / 900mA power output to USB device.
- Built-in 4-pin power connector for receiving extra power supply from system.
- Hot-swapping feature allows you to connect/disconnect devices without powering down the system.
- Driver supports for Microsoft Windows 2000, XP, Vista, and 7 operation system.
- Certified by CE, FCC, RoHS, and Microsoft WQHL approval.



#### **Specification**

Interface: Single-Lane (x1) PCI Express Gen2

Mode: USB3.0

Controller: NEC µPD720200
Port: 2 external USB3.0 ports

Speed: Data Transfer rate of 1.5/12/480/5000 Mbps.

Low Speed (1.5Mbps), Full Speed(12Mbps), High Speed(480Mbps), Super Speed(5Gpbs)

Power Input: 4-pin CD-ROM Type Power Connector

**Power Output:** +5V / 900mA (each port) **PCB Dimension:** 80 (W) x 68.5(L)mm

Bracket: Standard 121mm / Low Profile 79.2mm

O.S. support: Windows2000/XP/2003/Vista/7, (32/64-bit)

**Environment :** Operation temp. 0  $^{\circ}$ C  $\sim$  57  $^{\circ}$ C

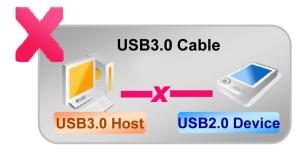
Operation humidity: 5  $\sim$  95% RH Storage temp.-20  $^{\circ}$ C  $\sim$  85  $^{\circ}$ C

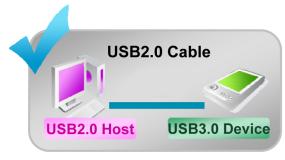
### **Package**

- USB2300
- CD Drive
- User's Manual

### **Backward Compatible Application**

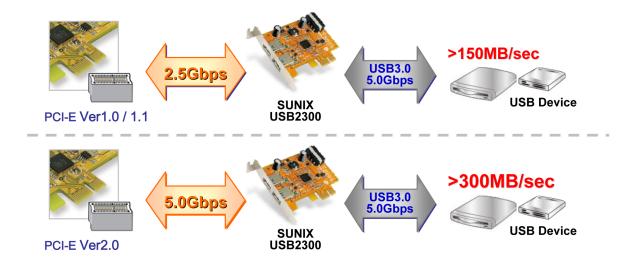








#### The Performance of USB3.0



## **USB** Comparison

	Speed	Transmission	Power Supply	Cable Length
USB1.1	Low-speed(1.5Mbps) Full-speed(12Mbps)	Half-duplex two-wire differential signaling Unidirectional data flow with negotiated directional bus transitions	5V / 500mA	5M
USB2.0	Low-speed(1.5Mbps) Full-speed(12Mbps) High-speed(480Mbps)		5V / 500mA	5M
USB3.0	Low-speed(1.5Mbps) Full-speed(12Mbps) High-speed(480Mbps) Super- speed(5.0Gbps)	Dual-simplex, four wire differential signaling separate from USB2.0 signaling Simultaneous bidirectional data flows	5V / 900mA	5M